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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LU, KUEN S

ART UNIT PAPER NUMBER

2167

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,109

Applicant(s)

SHAMRAO, ANDREW DIVAKER

Examiner

Kuen S Lu

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendments

1. This Action is in response to Applicants' amendments, filed on January 25, 2005. It is noted claim 1 was amended, claims 17-20 were cancelled and claims 2-16 remained as originally presented.
2. The Examiner has created a non-Final Rejection Office Action as shown next for rejecting claims 1-16.
3. As for the Applicant's REMARKS, filed on January 25, 2005, has been fully considered by the Examiner. For the Examiner's response, please see discussion in the section *Response to Arguments*, following the Office Action for non-Final Rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claim 1 is rejected are rejected under 35 U.S.C. 103(a) as being unpatentable over Delorme et al. (U.S. Patent 5,848,373, hereafter "Delorme") in view of Turner et al. (U.S. Pub. 2003/0191650, hereafter "Turner").

As per claim 1, Delorme teaches the following:

"A handheld device" (See Figs. 1, 3A and col. 18, lines 30-33 wherein Delorme's PDA is equivalent to Applicant's a handheld device), comprising:

“removable, replaceable, and upgradeable modules including a removable, replaceable, upgradeable, and re-writeable Personal Universal Memory card capable of receiving and storing information associated with a user from a server” (See Fig. 3A, col. 10, lines 60-63, col. 60, line 60 – col. 61, line 10 wherein Delorme’s PCM or PCMCIA cards, including memory card to store databases, for use in association with PDA can be upgraded and updated regularly and end-user’s access to centralized network server system is controlled by user identification and password is equivalent to Applicant’s removable, replaceable, and upgradeable modules including a removable, replaceable, upgradeable, and re-writeable Personal Universal Memory card capable of receiving and storing information associated with a user from a server); and

“a motherboard having sockets to accept the replaceable, and upgradeable modules, including at least one of: Central Processing Unit (CPU), graphics and sound controller, and system memory” (See Fig. 3A, col. 10, lines 60-63, col. 60, line 60 – col. 61, line 10 wherein Delorme’s PCM or PCMCIA cards, including memory card to store databases, are physically inserted to a system, being communicated by the system’s processing module on the main board for obtaining data to process, is equivalent to Applicant’s a motherboard having sockets to accept the replaceable, and upgradeable modules).

Delorme does not specifically teach the information is “wherein, based on the information associated with the user and on the user-determined hardware configuration of the device through user-selected replaceable, and upgradeable modules, the server downloads only applications that can be supported by the user-determined configuration of removable, replaceable, and upgradeable modules”.

However, Turner teaches “wherein, based on the information associated with the user and on the user-determined hardware configuration of the device through user-selected replaceable, and upgradeable modules, the server downloads only applications that can be supported by the user-determined configuration of removable, replaceable, and upgradeable modules” (See Page 1, [0006]-[0007] and Page 2, [0015] wherein Turner’s user profile is stored in the server to establish user equipment information through user’s registration or interaction with the server, and information about end-user’s equipment and their configuration is available through the server profile database at the server. Further, end-user is registered as owning devices, and server notifies the user about the new features, software releases for equipment or services upgrade on one or more of the devices, including downloading from the internet is equivalent to Applicant’s wherein, based on the information associated with the user and on the user-determined hardware configuration of the device through user-selected replaceable, and upgradeable modules, the server downloads only applications that can be supported by the user-determined configuration of removable, replaceable, and upgradeable modules).

It would have been obvious to one having ordinary skill in the art at the time of the applicant’s invention was made to combine Turner’s reference with Delorme’s teaching by appropriately upgrading system hardware as information and textual backgrounds increases in complexity as suggested by Delorme, and utilizing Turner’s teaching on upgrade by maintaining a user profile database at the server for registering user’s devices because both references integrate modules and devices into user system and

the combination of references would have enabled Delorme's modular type of system compatible with the current functionalities and features available for the ever-evolving devices because of upgrade and replacement.

6. Claim 9 is rejected are rejected under 35 U.S.C. 103(a) as being unpatentable over Delorme et al. (U.S. Patent 5,848,373, hereafter "Delorme") in view of Turner et al. (U.S. Pub. 2003/0191650, hereafter "Turner"), as applied to claim 1 above and further in view of Tsai (U.S. Patent 6,098,938).

As per claim 9, Delorme teaches a motherboard having sockets to accept the replaceable and upgradeable PCM or PCMCIA cards at See Fig. 3A, col. 10, lines 60-63, col. 60, line 60 – col. 61, line 10 as previously described in claim 1 rejection.

The Delorme or Turner reference does not specifically teach the motherboard has a central processing unit (CPU) socket to accept the removable, replaceable, and upgradeable central processing unit.

However, Tsai teaches retention mechanism to replace a CPU at the Abstract.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to further combine Tsai's teaching with the combined reference of Turner and Delorme by implementing replaceable and upgradeable CPU module because Delorme teaches upgrading replaceable modules on PDA and hardware upgrade when application getting more in complex while Tsai teaches a convenient way for replacing CPU, and the further combined teaching would have

allowed Delorme's system to include CPU as one of the replaceable and upgradeable modules to cope with the growth of application.

7. Claims 2-4 are rejected are rejected under 35 U.S.C. 103(a) as being unpatentable over Delorme et al. (U.S. Patent 5,848,373, hereafter "Delorme") in view of Turner et al. (U.S. Pub. 2003/0191650, hereafter "Turner"), as applied to claim 1 above, and further in view of Odinak et al. (U.S. Pub. 2002/0173889, hereafter "Odinak").

As per claim 2, the combined teaching of Turner and Delorme teaches handheld device with replaceable and upgradeable PCM modules, including storing database on memory card and user information for accessing server, as previously described in claim 1 rejection.

The combined Turner-Delorme reference does not specifically teach the module is an identification card.

However, Odinak teaches "Personal Universal Memory card is used as an identification card for interaction with a device that requires user information" (see Page 2, [0026] wherein Odinak's memory module stored personalized settings, credit card information and personal identification is equivalent to Applicant's Personal Universal Memory card is used as an identification card for interaction with a device that requires user information).

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to further combine Odinak's teaching with the combined reference of Turner and Delorme by including Personal Universal Memory as a replaceable module because the Delorme reference teaches database stored in a replaceable memory module of a handheld device and user's access to server, the further combined teaching would have allowed the PUM card as a module to perform local database update and remote database access.

As per claim 3, Odinak further teaches "the Personal Universal Memory card is used to customize a device to the needs of the consumer" (see Page 2, [0026] wherein Odinak's memory module is also used as a security device to enable or disable features of telematic control unit is equivalent to Applicant's the Personal Universal Memory card is used to customize a device to the needs of the consumer).

As per claim 4, Odinak further teaches "Personal Universal Memory card is credit-card-sized" (See Page 2, [0022] wherein Odinak's module device is configured to receive modules such as standard PCMCIA or CF cards is equivalent to Applicant's Personal Universal Memory card is credit-card-sized).

8. Claims 5-8 are rejected are rejected under 35 U.S.C. 103(a) as being unpatentable over Delorme et al. (U.S. Patent 5,848,373, hereafter "Delorme") in view of Turner et al. (U.S. Pub. 2003/0191650, hereafter "Turner"), as applied to claim 1 above, and further in view of Tolopka (U.S. Patent 6,044,349, hereafter "Tolopka").

As per claim 5, the combined Turner-Delorme reference teaches a hand-held device with socket for replaceable and upgradeable modules.

The combined reference does not specifically teach "Personal Universal Memory card is used as a credit card, debit card, or ATM card", although Delorme teaches module device is configured to receive modules such as standard PCM or PCMCIA as previously described in claim 1 rejection.

However, Tolopka teaches "Personal Universal Memory card is used as a credit card, debit card, or ATM card" (See col. 1, lines 28-31 and 46-51 wherein Tolopka's utilizing smart card for financial and medical usage is equivalent to Applicant's Personal Universal Memory card is used as a credit card, debit card, or ATM card).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Tolopka's teaching with Turner and Delorme's references by enabling memory storage card with financial transaction capability because by doing so the card would have been one for multiple-purposes smart card such that user would have been able to use credit card and information flexibly.

As per claim 6, Tolopka further teaches "the Personal Universal Memory card contains a cryptographic key" (See at col. 1, lines 53-60 wherein Tolopka's using encrypted security information on the smart card is equivalent to Applicant's the Personal Universal Memory card contains a cryptographic key).

As per claim 7, Tolopka further teaches "the cryptographic key protects the user's privacy during use" (See col. 1, lines 53-60 and col. 3, lines 36-42 wherein Tolopka's encrypted security password and encrypted personal identification on the smart card is equivalent to Applicant's the cryptographic key protects the user's privacy during use).

As per claim 8, Tolopka further teaches "wherein the cryptographic key is used to securely store the user's biometric scan on the Personal Universal Memory card for later comparison against user scans conducted for activating a user-session or for conducting transactions" (See col. 3, lines 36-42 wherein Tolopka's encrypted personal identification and/or biometric code stored on the smart card is equivalent to Applicant's wherein the cryptographic key is used to securely store the user's biometric scan on the Personal Universal Memory card for later comparison against user scans conducted for activating a user-session or for conducting transactions).

9. Claims 10-16 are rejected are rejected under 35 U.S.C. 103(a) as being unpatentable over Delorme et al. (U.S. Patent 5,848,373, hereafter "Delorme") in view of Turner et al. (U.S. Pub. 2003/0191650, hereafter "Turner"), as applied to claim 1 above, and further in view of Nguyen (U.S. Patent 6,401,157, hereafter "Nguyen").

As per claim 10, the combined Turner-Delorme reference teaches "a motherboard having sockets to accept the replaceable, and upgradeable modules" as previously described in claim 1 rejection.

The combined reference does not specifically teach "wherein the motherboard has a Random Access Memory socket to accept the removable, replaceable, and upgradeable Random Access Memory module".

However, Nguyen teaches "wherein the motherboard has a Random Access Memory socket to accept the removable, replaceable, and upgradeable Random Access Memory module" (See col. 5, lines 48-60 wherein Nguyen's motherboard having sockets for removable, replaceable, and upgradeable random access memory chips is equivalent to Applicant's wherein the motherboard has a Random Access Memory socket to accept the removable, replaceable, and upgradeable Random Access Memory module).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Nguyen's teaching with Turner and Delorme's references by designing the motherboard of the hand-held device with flexibility of removing, replacing and upgrading the random access memory chips because by doing so the computer system would have been a modularly configured such that device replacement or upgrading could have been performed flexibly.

As per claim 11, Nguyen further teaches "wherein the motherboard has a Read Only Memory socket to accept the removable, replaceable, and upgradeable Read Only Memory module" (See at col. 5, lines 33-41 wherein Nguyen's motherboard having sockets for removable, replaceable, and upgradeable random access memory chips is

equivalent to Applicant's wherein the motherboard has a Read Only Memory socket to accept the removable, replaceable, and upgradeable Read Only Memory module).

As per claim 12, Nguyen further teaches "wherein the motherboard has a Read Only Memory socket to accept the removable, replaceable, and upgradeable Read Only Memory module" (See Fig. 6, wherein Nguyen's element Voice Entry is equivalent to Applicant's wherein the motherboard has a Read Only Memory socket to accept the removable, replaceable, and upgradeable Read Only Memory module).

As per claim 13, Nguyen further teaches "wherein the motherboard has a graphics module socket, further comprising a removable, replaceable, and upgradeable graphics module adapted to be plugged into the graphics module socket" (See col. 5, lines 7-13 wherein Nguyen's graphic device interface is equivalent to Applicant's wherein the motherboard has a graphics module socket, further comprising a removable, replaceable, and upgradeable graphics module adapted to be plugged into the graphics module socket).

As per claim 14, Nguyen further teaches "a wireless module socket, further comprising a removable, replaceable, re-writeable, and upgradeable wireless module adapted to be plugged into the wireless module socket" (See col. 3, lines 1-7 wherein Nguyen's plug-in devices are on hot-plug sockets is equivalent to Applicant's a biometric scanner socket, further comprising a removable, replaceable, re-writeable,

and upgradeable biometric scanner adapted to be plugged into the biometric scanner socket).

As per claim 15, Nguyen further teaches "a biometric scanner socket, further comprising a removable, replaceable, re-writeable, and upgradeable biometric scanner adapted to be plugged into the biometric scanner socket" (See col. 3, lines 1-7 wherein Nguyen's plug-in devices are on hot-plug sockets is equivalent to Applicant's a biometric scanner socket, further comprising a removable, replaceable, re-writeable, and upgradeable biometric scanner adapted to be plugged into the biometric scanner socket).

As per claim 16, Nguyen further teaches "a card reader slot to accept the removable, replaceable, re-writeable, and upgradeable Personal Memory card" (See col. 3, lines 1-7 wherein Nguyen's plug-in devices are on hot-plug sockets is equivalent to Applicant's a card reader slot to accept the removable, replaceable, re-writeable, and upgradeable Personal Memory card).

10. The prior art made of record

- A. U.S. Publication 2002/0173889
- B. U.S. Publication 2003/0191650
- C. U.S. Patent 6,044,349
- E. U.S. Patent 6,401,157
- I. U.S. Patent 5,848,373

J. U.S. Patent 6,098,938

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

D. U.S. Patent 5,867,821

F. U.S. Patent 5,630,174

G. U.S. Patent 5,551,102

H. U.S. Publication 2002/0052843

Response to Arguments

11. Applicant's arguments with respect to claims 1-17 have been considered but are not persuasive, please see discussion below:

a). At Page 4, the Applicant argued that the Odinak reference does not teach "motherboard having sockets to accepts to accept the replaceable and upgradeable module".

As to the above argument a), the Examiner respectfully disagreed. Both the Odinak and the Delorme, cited in current Office Action for non-Final Rejection, references allow modules to be inserted to the device. The module is inserted in such a way that the data on the module can be processed suggests its connection to a bus of the device which the Examiner interpreted as equivalent to a module inserted to the motherboard.

b). At Page 5, the Applicant argued that the Examiner failed to establish and support a *prima facie* obviousness for suggestion or motivation to modify reference.

As to the above argument b), the Examiner respectfully disagreed. In response to applicant's argument that there is no suggestion to combine the references, the

examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Delorme reference suggests upgrading system hardware as information and textual backgrounds increases in complexity and Turner teaches upgrading hardware by maintaining a user profile database at the server for registering user's devices, and further, both references teach integrating modules and devices into a system, hereby the combination of references would have enabled Delorme's modular type of system compatible with the current functionalities and features available for the ever-evolving devices through upgrade and replacement.

c). At Pages 6-9, the Applicant continued to argue that the Odinak reference does not teach a motherboard having sockets to accept replaceable and upgradeable modules.

As to the above argument c), the Examiner respectfully suggested to further review the claim 1 rejection as previously described in the Office Action for non-Final Rejection.

d). At Pages 10-14, the Applicant further argued about the motivations of combining teachings of Odinak and Turner, and further of Nguyen.

The above arguments have been fully considered but is moot on new grounds of rejections by using Delorme as the primary reference. It is sincerely believed the

Examiner's interpretation of the claims is fair and reference cited for providing teaching or its equivalent for the claim language is reasonable.

Conclusions

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-4894. The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kuen S. Lu

Patent Examiner

March 30, 2005



Luke Wassum

Primary Examiner

March 30, 2005